SMITH: FORMICIDÆ

A NEW SPECIES OF CAMPONOTUS, SUBG. COLO-BOPSIS FROM MEXICO (HYMENOPTERA: FORMICIDÆ)

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Ants of the genus *Camponotus*, subgenus *Colobopsis* Mayr, occur in all zoogeographical regions of the world except possibly the Ethiopian. They form small colonies of a few dozen to several hundred individuals, nesting in culms of sedges, stalks of plants, branches of trees and shrubs, insect galls, hollow nuts and acorns, and crevices of wood. Some forms, if not all, may be polydomous. Although most of them are diurnal, there are also some that are nocturnal. Their food seems to be largely honeydew and the flesh of arthropods.

In the species of this group there are dimorphic or feebly polymorphic workers, the largest individuals of which are known as soldiers and are easily recognized by the peculiarly shaped subcylindrical head, the anterior portion of which is truncated and very often concave. The head is well adapted for blocking the small, circular openings of the nest to keep out intruders. Although the soldier and female can be readily distinguished from other forms of *Camponotus*, the worker and male are not so easily recognized.

Camponotus (Colobopsis) mathildeæ is, so far as I am aware, the second species to be described from Mexico, Emery having described cerberulus from a female collected in the State of Michoacan (1920, Bol. Soc. Ent. Ital. 52: 34). Wheeler (1934, Bul. Mus. Comp. Zool. 77: 214) described the soldier and male of what he believes to be cerberulus. If Wheeler's interpretation is correct, mathildeæ cannot possibly be synonymous with cerberulus.

There is no described form of *Camponotus*, subgenus *Colobop*sis, known to me which has even a near affinity to *mathildea*. This new species has so many excellent and easily recognizable

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characters that one should have no difficulty in identifying it in future collections. Since it has been intercepted on at least three occasions on orchids originating in Mexico, it does not appear to be an especially rare form.

Camponotus (Colobopsis) mathildeæ, new species

SOLDIER.—Length 5.75 mm. (Fig. 2, anterior view of head; Fig. 3, profile of body).

Head subcylindrical, longer than broad, widest anteriorly; posterior border almost imperceptibly emarginate. Antenna 12-segmented; scape flattened, narrowest at the base, widening apically, the apex distinctly surpassing the posterior corner of the head; funiculus widening apically but not forming a well defined club. Eye oblong, moderately convex, with numerous facets; situated less than its length from the posterior corner of the head. Frontal carinæ distant from each other, divergent posteriorly. Clypeus viewed from above, more than two and one-half times as wide as long, with sharp, bimarginate anterior border. In profile, the truncated surface of the head sloping anteroventrally; viewed anteriorly, the truncated surface subcylindrical, slightly wider than high, and concave, with sharply carinate lateral borders. Clypeus somewhat wedge-shaped, narrowest ventrally, with sharply carinate, uneven lateral borders; divided longitudinally, by a sharp, uneven carina. Mandible with 4 apical teeth and an edentate basal portion. In profile, the posterior part of the prothorax and much of the mesothorax moderately convex and almost on the same plane. Mesoepinotal impression distinct but not noticeably wide or deep. Base of epinotum meeting the declivity in an obtuse angle. From above, the posterior portion of the pronotum and epinotum with a distinct but not deep, longitudinal impression. Legs moderately long, with somewhat incrassated femora and tibiæ, the femora of the anterior pair of legs more noticeably incrassated than those of the other legs. Petiole, in profile, with a subrectangular node; the node, from above, wider dorsally than ventrally and with a distinct but not deep impression.

Anterior two-thirds or more of the head subopaque, more or less coarsely rugose-reticulate with punctate interrugal spaces; the coarse sculpturing extending on the dorsal surface of the head as far posteriorly as the termination of the frontal carinæ; remainder of head and body finely shagreened.

Hairs on the head yellowish, short, erect, obtuse, absent on the truncated surface, extending on the sides almost to the eyes and on the dorsal surface almost to the posterior border. The hairs slightly longer and less obtuse on the front and vertex of the head. Antennal scape with a few, short, erect hairs. Gaster with scattered, erect hairs in addition to the transverse row of hairs near the posterior border of each segment; hairs on the venter and at the apex longer than elsewhere.

Anterior two-thirds or more of the head light brown or yellowish brown; borders of the mandibles, sides of the truncated surface, and elypeal carinæ SEPT., 1949]

darker; remainder of head, body and appendages blackish to black, with the exception of the tarsi.

WORKER.-Length 5.37 mm. (Fig. 1, profile of body)

Head longer than broad, narrowest anteriorly, with rounded posterior border and moderately convex sides. Eye of approximately the same shape and position as that of the soldier. Scape proportionally longer than that of the soldier exceeding by approximately one-fourth its length, the posterior border of the head. Frontal carinæ well separated, posteriorly divergent, not as long as the greatest width between them; with a distinct but not strongly developed frontal furrow extending their full length. Clypeus subrectangular, approximately as wide as long, with a median carina extending its full length. In profile, the thorax is highest where the anterior face of the prothorax meets the dorsal surface of the pronotum. Mesoepinotal impression extraordinarily deep and broad, with a distinct and very protuberant spiracle on each side. Base of epinotum highest at the point where it meets the declivous surface in a prominent angle. From above, both pronotum and epinotum with a distinct but not deep, longitudinal impression, which in some aspects, at least, gives the epinotum a somewhat bicarinate appearance. Legs, petiole, and gaster not materially different from that of the soldier.

Anterior part of head not sculptured as in the soldier but with a few small punctures on the mandibles, clypeus and cheeks; remainder of body and appendages shagreened as in the soldier.

Hairs on head yellowish, fairly short and erect; confined to mandibles, clypeus, front and vertex; lacking on the sides and ventral surface of the head. Antennal scape with a few short, erect hairs. Gaster with hairs similar to those on gaster of the soldier.

Color somewhat lighter than that of the soldier, with head, thorax, and petiole dark brown, and the gaster blackish. Mandibles and tarsi an even lighter brown.

Type locality—Mexico (D. F.)

Described from a holotype soldier, a paratype soldier, and 14 paratype workers collected from orchids at Laredo, Texas on Jan. 28, 1948 by H. R. Cary of the Division of Foreign Plant Quarantines, Bureau of Entomology and Plant Quarantine, U. S. Department of Agriculture. These specimens bear Laredo Interception No. 46044. All have been placed in the United States National Museum under U.S.N.M. No. 59300. There are two other collections which I consider to be this same species: one made at Laredo by the same collector and on the same date as the type series, from orchids originating in the type locality, and recorded under Laredo Interception No. 46043; and the other made on July 31, 1948 by T. P. Chapman at Laredo, from orchids originating in Tamazunchale, San Luis Potosi, Mexico,

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recorded under Laredo Interception No. 46986. Except for the fact that the ants were collected on orchids, nothing is known concerning their habits.

Paratype workers show considerable variation in the width and depth of the mesoepinotal constriction, and also in the height and acuteness of the angle formed by the base and declivity of the epinotum. The erect hairs on the antennal scape vary in number from none to five or six. Workers under Laredo Interception No. 46043 are much darker (almost black) than the paratypes and also have the basal surface of the epinotum almost horizontal instead of ascending to meet the declivity.

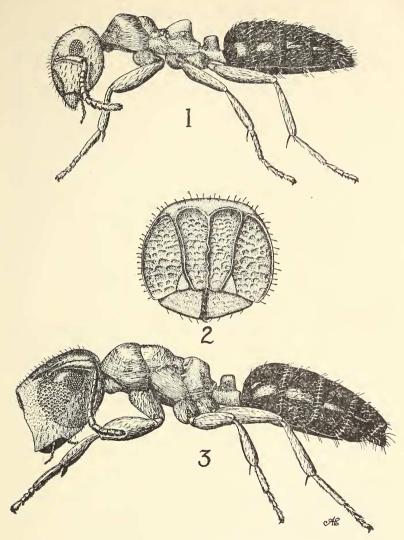
The soldier can be distinguished from that of other species by the shape of its head which is much widened anteriorly; the concave truncated surface with sharp lateral borders, the wedgeshaped clypeus with sharp lateral borders and a sharp, longitudinal carina dividing it into two equal parts, and by the distinct, longitudinal impression on the posterior part of the pronotum and epinotum.

The worker can be distinguished by an impression on the pronotum and epinotum similar to that of the soldier, by the wide and deep mesoepinotal impression with a prominent spiracle on each side, and by the basal surface of the epinotum meeting the declivity in a high and prominent angle. The thorax of the worker bears a striking similarity to that of some of the ants of *Camponotus*, subg. *Myrmocladacus*.

I take pleasure in naming this ant for Miss Mathilde M. Carpenter, the very efficient and courteous librarian of the Division of Insects, U. S. National Museum.

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(PLATE VII)



Camponotus (Colobopsis) mathildeæ, new species. Fig. 1, body of worker in profile. Fig. 2, anterior view of head of soldier. Fig. 3, body of soldier in profile. (Illustrations by Miss Addie Egbert.)